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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,691	10/14/2003	Adel B. Mansour	2802-359-040	7056

7590 06/16/2005

Christopher H. Hunter  
PARKER-HANNIFIN CORPORATION  
6035 Parkland Boulevard  
Cleveland, OH 44124-4141

EXAMINER
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HWU, DAVIS D

ART UNIT	PAPER NUMBER
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3752

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/685,691

Applicant(s)

MANSOUR ET AL.

Examiner

Davis D. Hwu

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-14, 17, 18, 21, 22 and 27-37 is/are allowed.
- 6) ☒ Claim(s) 1-5, 9, 15, 19, 20, 23, 24 and 26 is/are rejected.
- 7) ☒ Claim(s) 6-8, 10, 16 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/14/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 9, 15, 19, 20, 23, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baun in view of Southern.

The patent to Baun discloses an injector for distributing liquid sprays comprising an inlet 25 including a port to receive fluid, a stem assembly, the stem assembly including an internal circuit fluidly connected to the port, and a manifold 16 supported by the stem assembly and including an internal passage connected to the internal circuit in the stem assembly, the manifold including an elongated manifold formed of multiple plates 27 and having a plurality of nozzles 28 spaced along the manifold segment, wherein each of the nozzles is fluidly connected to the internal passage for delivering sprays of fluid. Baun does not disclose an inlet fitting as recited. The patent to Southern teaches an injector for distributing liquid sprays comprising a manifold 21 having an inlet fitting 37 which includes a port to receive liquid in which the fitting can be easily removed when necessary. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Baun by incorporating an inlet fitting including a port to receive liquid at the inlet as taught by Southern in order to be able to remove the fitting when necessary. Southern also teaches an extension 35

Art Unit: 3752

interconnecting the manifold and the stem assembly as recited in claim 9. Regarding claim 19, since the device of Baun and Southern can spray kerosene, which is a fuel, it is fully capable of being used as a fuel injector for a gas turbine engine. Regarding claim 23, the device of Baun could comprise a plurality of inlets 25 at respective manifold segments and through the teaching of Southern the inlets would each have extensions interposed between the stem and respective segments as recited since it has been held that the duplication of the essential working parts of a device and their placements involve only routine skill in the art.

#### ***Allowable Subject Matter***

3. Claims 6-8, 10, 16, and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. Claims 11-14, 17, 18, 21, 22, and 27-37 are allowed.

#### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent to Hanano is pertinent to Applicant's invention.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davis D. Hwu whose telephone number is 571-272-4904. The examiner can normally be reached on 8:00-4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on 571-272-4919. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3752

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Davis Hwu

DAVIS HWU  
PRIMARY EXAMINER